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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/937,683	01/24/2002	Paul Charlton	0139US-HYDRAMATIC	5109

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SALTAMAR INNOVATIONS  
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SOUTH PORTLAND, ME 04106

EXAMINER

SALDANO, LISA M

ART UNIT PAPER NUMBER

3673

DATE MAILED: 09/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/937,683

Applicant(s)

CHARLTON ET AL.

Examiner

Lisa M. Saldano

Art Unit

3673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 July 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,5-14,16,19,20 and 22-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,2,5-14,16,19,20 and 22-26 is/are allowed.
- 6) ☒ Claim(s) 27 and 28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 27 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Standish et al (5,374,140).

Regarding claim 27, Standish discloses a drillable ground support bolt and a method of installing the same comprising a base block 12 with means to facilitate attachment to a drilling machine (see Fig.5 and column 3, lines 54-60), means 13 for driving a spindle having a member or sprocket 15 at one end that receives a proximal end of a rock bolt 31 including an internal cavity and an injection assembly 14 including passages 17,18 for retaining grouting compound wherein the passages are in communication with the internal cavity of the bolt 31 (see column 3, lines 55-70). The grouting compound is injected until it exits the internal cavity of the bolt, engaging the wall of the borehole (see column 4, lines 28-41). The passages are “*substantially*” in axial alignment with the internal cavity (see Figs. 5 and 6). The multiple passages may be used to discharge more than one grouting material into the said cavity. Standish discloses the bolt above wherein a spindle 13 is rotatable and a chuck 15 engages the proximal end of a bolt 31,

Art Unit: 3673

thereby rotating the rock bolt. Standish discloses the bolt above wherein passage 17 provides flushing fluid flows of water in communication with the bolt 31 internal cavity (see column 4, lines 29-44). The water flushes debris from the hole during drilling. Standish discloses the bolt above and a method of insertion of that self-drilling bolt comprising placing a drilling machine and bolt in alignment with a drilling location, engaging the bolt with a drilling head, using the bolt to drill a hole in rock strata, flushing the borehole with water to remove debris while drilling, injecting the borehole with grouting compound until the borehole is filled with a bonding compound (see column 4, lines 1-16).

Regarding claim 28, Standish discloses the bolt above and a method of insertion of that self-drilling bolt wherein the injection assembly shuts off the water during injection of grouting material into the cavity (see column 4, lines 29-35).

***Allowable Subject Matter***

3. Claims 1, 2, 5-13, 14, 16, 19, 20 and 22-26 are allowed.

4. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 1, the closest prior art, Standish et al (5,374,140) fails to disclose a plurality of internal passages for retaining and delivering grouting compound as well as passages through which a flushing fluid flows in communication with the internal cavity of the rock bolt in combination with the rest of the claimed invention. Regarding claim 14, the closest prior art, Standish et al (5,374,140) fails to disclose an injection assembly in a drill head comprising two

Art Unit: 3673

passages to contain and deliver separate materials arranged to keep the materials separate until each of the separate materials exits passages and enter an internal cavity in a rock bolt as claimed by the applicant in combination with the rest of the claimed invention. Regarding claims 19, the closest prior art, Standish et al (5,374,140) fails to disclose an injection assembly adapted to enable grouting compound injection from concentric passages in a body of a drill head such that the concentric passages and the internal cavity of the bolt are substantially in alignment, in combination with the rest of the claimed invention. Regarding claim 20, the closest prior art, Standish et al (5,374,140) fails to disclose a self drilling unitary rock bolt with an internal cavity that receives grouting material delivered from concentric passages in a drilling head of a drilling machine in combination with the rest of the claimed invention. Regarding claim 24, the closest prior art, Standish et al (5,374,140) fails to disclose a method of insertion of a rock bolt comprising the steps of injecting separate grouting materials into an internal cavity of the rock bolt from concentric passages wherein the passages have a common axis with the internal cavity of the rock bolt in combination with the rest of the claimed invention.

### ***Response to Arguments***

5. Applicant's arguments regarding the amended claims as presented, see Amendment A, filed July 30, 2003, with respect to claims have been fully considered and are persuasive. The rejection of claims numbered 1, 2, 5-13, 14, 16, 19, 20 and 22-26 has been withdrawn.

6. Applicant's arguments filed on July 30, 2003 regarding claims 27 and 28 have been fully considered but they are not persuasive.

Art Unit: 3673

In response to the applicant's argument on page 12, items 11) and 12) of the arguments, the examiner contends that the definition of a "drill head" as provided by the applicant is not the sole definition of a drill head. Furthermore, as broadly claimed by the applicant, a drill head may also be a converter drive places on a drill of a drilling rig to support a drillable ground support bolt (see Standish 5,374,140, column 3, lines 53-68). The rejection of claims 27 and 28 is maintained in light of the aforementioned statements.

### ***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lisa M. Saldano whose telephone number is 703-605-1167. The examiner can normally be reached on Monday-Friday, 8:30am-5:30pm.

Art Unit: 3673

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather C. Shackelford can be reached on 703-308-2978. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

lms

  
**Jong-Suk (James) Lee**  
**Patent Examiner**  
*primary* *Art 3673*